

Claims:

1. An electrostatic transfer type liquid electrophotographic printer comprising:
a continuous photoreceptor web having a charged surface and an opposing back surface,
wherein the web rotates around a printing path;
at least one exposing unit for selectively discharging the charged surface of the
photoreceptor web to form a latent electrostatic image;
at least one development unit for developing the latent electrostatic image on the
photoreceptor web into a toner image with an ink containing a liquid carrier and charged toner
particles, wherein the at least one development unit comprises a developer roller, a toner
removal roller, and a squeeze roller, and at least one of the developer roller, the toner removal
roller, and the squeeze roller have a corresponding backup roller adjacent to the back surface of
the photoreceptor web, and wherein the photoreceptor web is arranged to provide at least 1
degree of contact wrap around at least one backup roller; and
an electrostatic transfer unit for transferring the toner images formed in the at least one
development unit from the photoreceptor web to a print medium by electrostatic force.
2. The electrophotographic printer of claim 1, wherein each of the developer roller, the
toner removal roller, and the squeeze roller have a corresponding backup roller.
3. The electrophotographic printer of claim 2, wherein the photoreceptor web is arranged
to provide at least one degree of wrap around each of the backup rollers that correspond to the
developer roller, the toner removal roller, and the squeeze roller.
4. The electrophotographic printer of claim 1, wherein the developer backup roller and the
developer roller are positioned to provide a controlled gap between the developer roller and the
photoreceptor web to facilitate electrostatic transfer of charged toner particles to the
photoreceptor web.
5. The electrophotographic printer of claim 4, wherein the gap between the developer roller
and the photoreceptor web is adjustable.

6. The electrophotographic printer of claim 1, wherein the toner removal backup roller and the toner removal roller are positioned to provide a controlled gap between the toner removal roller and the photoreceptor web.
7. The electrophotographic printer of claim 6, wherein the gap between the toner removal roller and the photoreceptor web is adjustable.
8. The electrophotographic printer of claim 1, wherein the squeeze backup roller and squeeze roller are positioned to contact opposite sides of the photoreceptor web to apply a controlled amount of pressure to the photoreceptor web.
9. The electrophotographic printer of claim 8, wherein the amount of pressure applied to the photoreceptor web by the squeeze backup roller and the squeeze roller is adjustable.
10. The electrophotographic printer of claim 1, wherein a plurality of development units are arranged sequentially around the printing path of the photoreceptor web, and wherein each development unit provides charged toner particles of a different color from the toner particles of the other development units.
11. The electrophotographic printer of claim 1, wherein the electrostatic transfer unit comprises a biased transfer roller to effect electrostatic transfer of toner images to a print medium by electrostatic force.
12. The electrophotographic printer of claim 1, further comprising a feedback system for measuring and adjusting the position of at least one backup roller relative to its corresponding developer roller, toner removal roller, and squeeze roller.
13. The electrophotographic printer of claim 1, further comprising a feedback system for measuring and adjusting the position of at least one of the developer roller, toner removal roller, and squeeze roller relative to the photoreceptor web.

14. The electrophotographic printer of claim 1, wherein at least one development unit further comprises a concentration control unit for controlling the concentration of a toner image by adjusting the amount of liquid carrier applied to the photoreceptor web.

15. The electrophotographic printer of claim 14, wherein the concentration control unit comprises the toner removal roller of the development unit and a concentration control roller, and wherein each of the toner removal roller and the concentration control roller has a corresponding backup roller.

16. The electrophotographic printer of claim 15, wherein the photoreceptor web is arranged to provide at least one degree of wrap around each of the backup rollers that correspond to the toner removal roller and the concentration control roller.

17. The electrophotographic printer of claim 16, wherein the toner removal roller and its corresponding backup roller are positioned to provide a controlled gap between the toner removal roller and the photoreceptor web.